

**REMARKS/ARGUMENTS**

Claims 12-24 and 28-42 are pending in the application. Claims 12-24 and 28-42 have been canceled and new claims 43-62 have been added. Reconsideration is respectfully requested in light of the foregoing amendments and the following remarks.

**Specification**

The substitute specification has not been entered because it did not conform to 37 CFR 1.125(b) and (c) because of the following:

- (a) The substitute specification contained an improper incorporation by reference.
- (b) The reference to "lower-density or material deficient" transitional zones in paragraphs [0006] and [0014] of the substitute specification allegedly contains new matter.

Regarding the objection to the term "lower-density or material-deficient" transitional zones in paragraph [0006] of the previously non-entered substitutes specification, Applicants refer the Examiner to the original description at page 2, lines 14-16, where the zones are defined as such: "Transitional zones in which the density of the deposited material is lower than in the particles bound the particles at the side." Accordingly, in the original description on page 3, lines 26-27, the term "low-material transitional zone bound the particles from one another" should be understood as "low density transitional zone." Furthermore, Applicants submit that a proper translation of the related German text of the PCT application may be translated as "low density transitional zones delimit the particles from one another." Moreover, the term "material-deficient zones" has been changed to "low density zones."

Appropriate correction in the form of a new substitute specification, along with a Comparison Copy, which does not include the improper incorporation by reference and the alleged new matter is submitted herewith. The specification has been revised to conform it to the preferred format for U.S. patent applications as required in the Office Action.

**Claim Objections**

Applicants respectfully submit that the objections to claim 13 are now moot in view of the cancellation this claim.

**Claim Rejections - 35 USC § 112**

Claims 12-24 and 28-42 have been rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants respectfully submit that the claims rejections under section 112 are now moot in view of the cancellation these claims.

**Double Patenting**

Claims 12-24 and 28-42 were provisionally rejected on the grounds of nonstatutory obviousness type double patenting as allegedly being obvious over claims 14-34 of copending Application No. 10/835,358 in view of United States Patent No. 5,583,815 to Muehlberger. Applicants respectfully submit that the above double patenting rejections are now moot in view of the cancellation of claims 12-24 and 28-42 . Furthermore, Applicants acknowledge that a timely filed terminal disclaimer may be used to overcome the provisional rejection. Applicants are prepared to do so should the need arise when one or the other of the applications has allowed claims.

**Claim Rejections - 35 USC § 103**

Claims 12-13, 16-24, 28, 29 and 33-39 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over WO 96/06200 (hereinafter '200) in view of Zheng (US 5,187,372).

Claims 14-15 and 30-32 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over '200 in view of Zheng (US 5,187,372) as applied to claims 12-13, 16-24, 28, 29 and 33-39 above, and further in view of Muehlberger (US 5,853,815).

Claims 40-42 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over '200 in view of Zheng (US 5,187,372) as applied to claims 12-13, 16-24, 28, 29 and 33-39 above, and further in view of Hasz et al. (US 5,660,885).

Applicants respectfully submit that the above claims rejections under section 103 are now moot in view of the cancellation of these claims. Additionally, Applicants submit that the low pressure environment disclosed in '200 is a pressure of less than  $1.9984 \times 10^4$  Pa. (e.g. see page 5, first paragraph of the summary of the invention; page 6, third full paragraph; claim 1 and claim 22 of '200), as opposed to the requirement of maintaining a pressure in the range between 50 and 2000 Pa as recited in new claim 43. In addition, the preferred plasma power used in '200 is greater than 92 kW, and more particularly between 110 and 120 kW (e.g., see last paragraph of page 8; top of page 10; and claims 6-7 of '200), as opposed to power in the range from 40 to 80 kW as recited in new claim 43. Moreover, '200 is completely silent and does not disclose a method for the manufacture of a thermally insulating layer system on a metallic substrate, wherein the layer system includes at least one anisotropically structured thermally insulating layer having elongate particles, wherein the elongate particles in this thermally insulating layer, which form an anisotropic microstructure are aligned substantially perpendicular to the substrate surface and transition regions with little material delimit the particles relative to one another, as is recited in new claim 43. '200 is concerned with forming a lithographic plate and not with the manufacture of a thermally insulating layer on a metallic substrate. '200 is directed to the forming of surface layer for a lithographic plate. There is not one teaching in '200 directed to the concept of a thermal insulating layer or an anisotropically structured thermally insulating layer having elongate particles as recited in new claim 43.

Furthermore, Applicants submit that a person of skill in the art would not combine the above references in the manner suggested by the Office Action, since the '200 primary reference is entirely non-analogous with the other secondary references. The '200 reference is directed to the manufacture of printing plates, whereas the secondary references are all related to the formation of barrier coatings on components used in hostile thermal environments, such as gas turbine engine components. Applicants submit that a person of skill in the art of forming barrier coatings on components used in hostile thermal environments, such as gas turbine engine components would not look to advancements in printing plates. For that matter, the Office Action fails to provide a reasoned basis as to why a person skilled in the art of making printing plates would care to coat such plates with a barrier coating to protect the underlying metal

substrates from damage in a hostile environment. Assuming *arguendo* that a person of ordinary skill in the art of printing plate manufacture would combine '200 with Zheng, which Applicants submit would not, the deficiencies of '200 are not overcome by Zheng or any of the other cited secondary references. In fact, Zheng requires the deposition of bond coat for its thermal barrier coat by using metal powders that provide for a bimodal (dual-peak) particle size distribution, so that the bond coat has a rough surface (e.g. see col. 4, lines 40-60). This rough surface is formed by a high velocity oxy-fuel (HVOF) process, where two different size power particles are sequentially or simultaneously deposited onto the substrate surface. Applicants respectfully submit that if the printing plate of '200 was HVOF deposited with a metal powders that provide for a bimodal (dual-peak) particle size distribution, the utility of the printing plate would be destroyed as it no longer would have a surface layer that was formed from a uniform particle size (e.g., see claims 14-16 of '200; and note that every example in '200 uses a powder with a single mean particle size). Applicants respectfully submit that the hypothetical combination of '200 and Zheng is an impermissible combination as the utility of the printing plate of '200 would be destroyed by the teachings of Zheng. Moreover, considering that Zheng discloses a two-part thermal barrier coating system having a bond coat and a ceramic layer, are the Applicants to assume that a person skilled in the art would just selectively decide to only use one of the two two-part coating system of Zheng, by either skipping Zheng's bond coat or Zheng's ceramic layer when combining '200 with Zheng? Applicants respectfully decline to speculate.

Regardless of the above now moot rejections, Applicants respectfully submit new claims 43-62 are patentable over the hypothetical combination of the cited references since neither of these references either alone or in combination disclose or suggest every limitation of the amended claims. For example, in addition to the deficiencies discussed above, none of the references taken alone or in the hypothetical combinations as suggested by the Office Action disclose or suggest a method for the manufacture of a thermally insulating layer system on a metallic substrate, wherein the layer system includes at least one anisotropically structured thermally insulating layer having elongate particles, wherein the elongate particles in this thermally insulating layer, which form an anisotropic microstructure are aligned substantially perpendicular to the substrate surface and transition regions with little material delimit the

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particles relative to one another, as is recited in new claim 43. Dependant claims 44-62, which depend from new claim 43, and which add further limitations to their base claims are also patentable over the combination of the cited references, at least because of their dependence on the patentable claim 43.

### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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